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ERYTHEMA PAPULATUM ET TUBERCULATUM.

[Read before the Boston Society for Medical Improvement, Oct. 8th, 1860, and communicated for the Boston Medical and Surgical Journal.]

BY SILAS DURKEE, M.D., BOSTON.

[WITH FOUR DRAWINGS OF THE CASE DEPOSITED IN THE SOCIETY'S ROOMS.]

THE patient, Mrs. J. B. Peck, of Connecticut, was presented for examination. Her age is 54 years. She was born of healthy parents, both of whom are now living at the age of more than 80 years; is a tall, stout, well-built woman, and at the age of 45 weighed 160 pounds. She is intelligent and of good character. She has never been pregnant, has never had any uterine disease, and the menstrual function ceased at the usual period. She reports that ten years ago, and without any appreciable cause, a bright scarlet-colored eruption appeared upon the face, the trunk of the body and the extremities, producing but little inconvenience of any kind, excepting a moderate degree of heat and itching, until the expiration of about ten months, when a succession of small bunches or lumps appeared and soon terminated in "sores," which (she states) her physicians compared to the pustules or sores of smallpox.* Each of these "sores" required, as near as the patient can recollect, from twelve to fifteen days for their entire development and disappearance. They yielded but little discharge of any kind, and ended in a dark incrustation or scab. They were not painful at any time, like boils, nor did they in any wise incommod the patient so as to deprive her of sleep or essentially to diminish her ability to attend to her domestic duties as usual; although, during this period of one year, she had a somewhat impaired appetite, and lost several pounds of flesh. Only a few pustules (if this word is allowable, which I somewhat doubt) formed

* Burgess, in his *Treatise on Eruptions of the Face, Head and Hands*, relates, at page 23, a case of erythema papulatum simulating smallpox.

upon the face or body; but on the lower limbs they were numerous. On the right leg were sixty at one time. The eruption continued to present this *quasi pustular* character, or softening of the papules, for about two months, after which the patient remained in fair health nearly five years.

In 1856, the present disease began to show itself around the knee-joints, in the form of small, hard, red, solitary papules, slightly raised above the adjacent integument, and of a round or oval figure—mostly of the latter. In a few weeks they were developed on the chin and the front part of the neck; and in seven or eight months various portions of all the extremities were more or less involved in the eruption, which, from the account given by the patient, appears to have been *erythema papulatum*. The complaint has undergone repeated alternations of improvement and relapse from time to time; but for the last twelve months it has been gradually extending itself, without any intervals of amendment; and now the health of the patient is much impaired. Although she has a good appetite almost uniformly, yet her weight has diminished to 139 pounds; the pulse is 100 per minute; the tongue clear; she complains of a constant feeling of lassitude and debility; her sleep has of late been more or less disturbed from cutaneous irritation, although she suffers no absolute pain.

In examining the diseased skin, we will commence with that portion on which the eruption is in its incipient state, and then proceed to examine other districts, where it has existed for several months or years. On the lower part of the abdomen of the left side, and on the upper portion of the corresponding thigh, there are twelve or fifteen bright red spots of an oval shape, slightly but distinctly raised above the surrounding skin, and varying from one to two lines in diameter. They are hard to the touch; and, on being gently pressed, the color disappears and returns immediately on removing the finger. These papules were developed only two or three days ago. In this vicinity, also, are several dull-red blotches, some circular, and others oval-shaped, and varying in size from the fourth to half an inch in diameter; nearly as soft and pliable to the touch as the healthy surface. These blotches were preceded by papules of the same character as those just spoken of. So states the patient.

The next most recent development of the malady is upon the left chest. On this region it has existed three months, and occupies several square inches. It has the axilla for its outward border in part, but it is quite irregular in its outlines. The surface here is of a dark livid color. There is considerable exfoliation of the cuticle from time to time. The first abnormal condition on this district consisted also of numerous papules, which remained but a few days, and then the skin gradually assumed the appearances now present. It is much thickened and somewhat uneven. The integument covering the superior and outer portion of the

right scapula has a similar aspect to that of the left chest. The diseased patch is well defined, and is raised above the healthy surface, as in psoriasis, to which affection it bears considerable resemblance. There is occasionally an exfoliation of the cuticle, but it is less furfuraceous than in psoriasis. The epiderma is detached, and falls off in shreds or flakes, produced by the friction of the clothing, which keeps the part somewhat raw and tender at several points. The eruption upon the part we are now considering took place more than three years ago. It soon passed into, and has ever since maintained the character which it exhibits to-day, with no essential variation. No tubercles have ever formed in this locality.

The next form of the disease which I shall attempt to describe consists of numerous tubercles (or *tubers*, as they are appropriately termed by Prof. Wilson in the last edition of his work on "Diseases of the Skin," London, 1857, page 92*). These tubers range from one line to more than one inch in diameter at the base, and are developed upon all the extremities, without any regularity as to their localization on corresponding portions of surface. The largest specimens are found on the front of the right knee. A few of them are solitary, and to a casual observer might suggest a slight resemblance to the immense thick crusts sometimes seen in *rupia*. In fact, one or two medical students gave expression to this thought. Some of the tubercles are quite hard and unyielding to the touch; others soft and elastic. Some are considerably flattened; others are very prominent, and rise more than half an inch above the skin. Nearly all, wherever situated, are more or less movable, thus showing that the subcutaneous cellular tissue has not participated in the morbid action. When the patient has been exercising, the diseased surface is of a much more brilliant red than at other times. Most of the time it has a deep livid or purplish color. There is no pain in any of the tubers; but the patient has for the last few weeks been disturbed, especially at night, by an itching and burning sensation in the affected parts.

One tubercle, which came upon the outer aspect of the right fore-arm, near the elbow, some eighteen or twenty months ago, has disappeared, leaving the integument much thickened and livid, and within a few days a small new tubercle has begun to show itself on the border of the cicatrix left by its predecessor. Patient reports that during the last few months some of the biggest tubercles have flattened down and diminished in size, and subsequently have regained nearly their maximum growth. The most remarkable excrescences to be seen at this time are situated about the

* Wilson says that the tubers vary in size "between a four-penny-piece and a shilling." Willis, in his "Illustrations of Diseases of the Skin," states that the "size is that of a half-penny, a penny, or a crown piece." He has an excellent drawing representing the disease in its earliest stages.

knee-joints, including the left popliteal space. In the right axillary region is a large group, each specimen being well-defined, distinct and projecting, and of the size of a small thimble at the base; likewise at the bend of the corresponding elbow is a cluster, covering a surface equal to a silver half dollar—the central tuber being as large as a common walnut, and having several smaller ones springing up around it.

Nearly the entire surface of the right thigh is covered with the eruption, which presents a very remarkable appearance, consisting, as it does, of tubers, large and small, some crowded together in groups, or solitary—papules interspersed here and there—the skin hypertrophied, boggy, rough, and coarse, of a dingy red or purplish hue, shaded with a faint yellowish green tint, and the cuticle partially removed in some spots; all which would lead to the supposition that much physical suffering must be the consequence. Yet such is not the fact. Even locomotion is not interfered with to any great extent. The patient is annoyed by a pretty constant pruritus, as in urticaria, but otherwise she experiences but very little local inconvenience. The complaint has made greater progress, and shows more diversified features on this limb than elsewhere, although all the extremities are seriously affected, as are likewise various portions of the body. Occasionally there is moderate swelling (not œdematosus) of the legs. This continues for a few days, and then subsides.

Oct. 8th.—During the last fortnight, the cuticle has shown a tendency to exfoliate from the summit of many of the tubercles on the thighs and about the knees; and more or less serous exudation has escaped from the denuded surfaces, as in acute eczema. The tubercles thus bereft of their natural covering, are now tender to the touch, and quite painful. The patient finds it inconvenient to walk any distance, and has in all respects failed since she came to the city. She desires to return to her friends before she becomes more feeble. She is much depressed in spirits, and fears she shall not live but a few weeks.

November 3d.—Under this date the patient writes me as follows:—"When I had been home a week, my right limb began to swell from my hip to my toes. The swelling lasted about eight days, and then began to go down. Since then it has been painful, and makes me lame to walk. The appearance of the sores is about the same as when I left Boston. They still continue to discharge a great deal of matter, and are more sensitive than they have been for a year before. The bunch on my right elbow is enlarged again. My appetite still continues good. J. B. PECK."

REMARKS.—I have seen eleven cases of *E. papulatum*. In one, a young merchant of this city, the eruption continued three weeks and then vanished. In all the other instances the peculiar morbid diathesis persisted for many months. And in four instances the

papules very gradually acquired the size and other attributes of *E. tuberculatum*. I had all desirable opportunities for observing the various and extraordinary phenomena that manifested themselves in the progress of these four cases. There was great uniformity in them; as much so as we find in the behavior of different cases of eczema, psoriasis, &c. I will not ask for time and space to describe all these phenomena, but will mention only the following:—In each of the four cases to which I have just referred, there was an eruption of *E. papulatum*, which lasted for several months and then disappeared; and the individuals enjoyed usual health for a period varying from eighteen months to three and five years. In each there was a second invasion of the disorder, which ultimately passed into the more grave tubercular form, and in three instances terminated in death. The final result of the case exhibited to the Society to-night remains, of course, to be seen. The prognosis, however, is altogether unfavorable.

I am not ignorant that a majority of writers who have anything to say upon the subject of erythema, tell us that it is not a dangerous or very serious affair in any of its varieties. Nevertheless, there are six fatal cases reported, besides those to which I have alluded in the preceding communication, and no amount of negations can impair the force of these cases. They are derived from different sources, and would seem to be invested with an authority or evidence which it would be unreasonable to question. It so seems to me, at least.

Willan, speaking of erythema tuberculatum, says, "I have seen but three cases of this latter disease, all of which terminated fatally." (London edition, 1808, page 484.) Mr. Elliotson, of London, relates a fatal case of erythema that occurred in his practice. Professor Wilson records one, and one occurred in St. George's Hospital, London, in 1855. Vide *British and Foreign Medico-Chirurgical Review*, October, 1856, page 497.

Whoever will turn to "Elliotson's Principles and Practice of Medicine," page 342, will find that he regards *E. tuberculatum* as a fatal malady; and that, in what I have offered, either now or hitherto,* I have assumed nothing.

In connection with this communication, I desire to submit the subjoined note from Dr. C. Gordon, who has for many years devoted special attention to the study and treatment of cutaneous diseases, and whose ability in this department is very generally acknowledged.

"HANCOCK AVENUE, NOV. 13, 1860.

"DEAR DR.,—I am greatly obliged to you for the opportunity you lately afforded me to see the case of *Erythema Tuberculatum* in the person of Mrs. Peck.

* I refer to a case of *E. tuberculatum et cedematosum* reported by me to the Society, and published in the *Boston Medical and Surgical Journal* for April 10, 1856; and in the *Virginia Medical Journal* for September, 1856, with two lithographic drawings.

"I have had occasion to observe very few cases of this remarkable form of cutaneous disease, in which, of late, you have been so much interested, and I never saw a case so well marked as the one above alluded to.

"The degree of *tubercular* or *tuberous* development must depend upon some peculiar constitutional element or disturbance, not understood in these cases; and, therefore, I am not surprised that some observers have doubted whether the case in question is really of the form of cutaneous disease you decided it to be. It is my opinion, however, that your diagnosis is correct, and I am happy to give my testimony in its confirmation.

Dr. Durkee.

Very truly,

C. GORDON."

CASE OF LACERATION OF THE VAGINA AT ITS JUNCTION WITH
THE UTERUS.

BY WM. J. BURGE, M.D., TAUNTON, MASS.

[Communicated for the Boston Medical and Surgical Journal.]

ON the morning of the 8th inst., I was summoned to the bed-side of Mrs. K., æt. 34, who had been delivered on the evening previous of a stillborn male infant, while under the care of a "*Physiopathic Doctor.*"

I found the woman lying upon her back, with her lower extremities partially drawn up, and in a condition which the medical reader will best understand from the following symptoms which were carefully noted at the time—viz.: pulse 132 and feeble. Respiration 33. Skin hot and dry. Tongue very dry and harsh. Abdomen much swollen and tympanitic. Countenance rather anxious. I immediately took the friends aside and informed them that in my opinion the case was one of extreme peril, and advised a consultation. They accordingly decided on calling Dr. Joseph Murphy, and, in the course of half an hour, that gentleman saw the case with me. He at once corroborated my opinion with regard to the danger of the patient. The grave symptoms above enumerated had supervened so speedily after delivery as to render the exact diagnosis somewhat obscure, although we were led to suspect rupture of the uterus.

The history of the case, as given by the husband and by the women in attendance, was substantially as follows:—

"The woman had been remarkably healthy up to the date of this confinement, and had given birth to three healthy children—two of whom are living. Previous labors natural and easy. Labor commenced at about noon on the previous day, and everything went on well until between eight and nine in the evening, when the 'Doctor' sent out for some medicine, of which he administered two teaspoonfuls, with a short interval, soon after which, the pains ceased and the 'Doctor' took away the child by force," but with-

out using instruments. The women gave it as their opinion that "the medicine cooled off the labor." The prescription proved to be Tilden's fluid extract of secale cornutum.

The treatment which Dr. Murphy and I agreed upon was as follows:—constant warm applications over the abdomen, perfect rest, attention to the bladder, anodynes administered to the extent of inducing semi-narcotism, and beef-tea in such quantities as the stomach would retain. There had been no dejection, nor had she passed water. With the catheter, I drew off about a quart of bloody-looking urine, which seemed to afford her some relief.

On Friday, there had been no abatement of the symptoms, so fatal in their tendency, and the only perceptible changes in the patient were, cessation of pain, greater irritability of the stomach, and failure of strength. The matters vomited were now of a dirty-greenish color, but not particularly offensive. From the time I first saw her, there had been scarcely any discharge from the vagina. An examination *per vaginam* furnished no clue to the existing lesion. The parts, including the entire vulva, were very much inflamed and swollen. She died at 6, A.M., on Saturday. The undertaker applied to me for a certificate of the cause of death. I could not conscientiously furnish one without further opportunities for examination. The friends consenting, a *post-mortem* was arranged for 2 o'clock, P.M., eight hours after death.

The surface presented nothing worthy of note, excepting great distension of the abdomen, which was somewhat pear-shaped. The vulva was "black and blue." Rigor mortis well marked. On making the first incisions, great care was required to avoid wounding the intestines, which were much inflated and glued together. The surface of the bowels, except at their junctions, was not covered with any amount of exudation, but appeared dry and glistening. The sanguineo-serous effusion into the peritoneal cavity was very slight, not more than four ounces, without coagula, and resembled the lochial discharge. Carefully lifting the bowels, we discovered on the right side of the pelvis, on the long axis of the vagina, about midway between the anterior and lateral mesial lines, a laceration about three inches in length, extending completely through the vaginal wall, and involving about an inch of the peritoneal covering of the uterus. The edges of the laceration were ragged, with no indication of previous disease, but presenting the appearance one would expect from a recent wound of the part, from a mechanical cause. A finger introduced into the vagina was met by one of the other hand passed through the laceration from the abdominal cavity. By turning the uterus a little, the *os uteri*, in a perfectly healthy condition, was brought into view through the laceration as we looked from the abdominal cavity. Both the external and internal appearance of the uterus was found, on thorough examination, to be perfectly natural, the laceration involving only its peritoneal covering.

The examination was made in presence of the "Physopathic Doctor" who first officiated in the case, and also my friends and fellow-townsmen, Drs. Joseph Murphy, H. B. Hubbard, Ira Sampson and John B. Chace; Dr. Chace assisting in the examination, and Dr. Murphy taking notes.

The following points were given by the "Physopath":—

"The os was fully dilated at 2, P.M. The delivery of a still-born infant was immediately followed by the placenta, at twenty minutes before 9, P.M. After the exhibition of ergot, one pain caused the expulsion of the child and placenta. The character of the pains was not such as to lead him to apprehend any unnatural occurrence. The presentation was natural." "It was a dry labor," said he; "I had to keep my hand greased all the time, and *it was as much as I could do to pass it round the head of the child.*"

I should not omit to state that the child was large, weighing 11 1-2 pounds, as I was informed by the friends, on my first visit.

Query.—Is rupture of the upper part of the vagina and merely the peritoneal covering of the uterus, likely to occur during natural labor, when there has been no previous disease of the tissues involved?

RECTO-VESICAL LITHOTOMY—BOZEMAN'S BUTTON SUTURE.

BY J. F. NOYES, M.D., WATERVILLE, ME.

[Communicated for the Boston Medical and Surgical Journal.]

HISTORY shows that this operation (recto-vesical) dates from about the beginning of the present century. M. Sanson, in an inaugural thesis, first described the operation. Of the several methods therein laid down, M. Maisonneuve, in later years, made an important modification. These all are fully described in systematic works on surgery, and call for no special mention from us here.

From the frequent evil results and ill success consequent upon the escape of stercoraceous matter into the bladder, and infiltration of urine, preventing the cicatrization and healing of the cut, the operation became obsolete.

The discovery of the "silver wire suture," the wonderful success consequent upon its use in treating vesico-vaginal fistules in the hands of Dr. Sims and others, led naturally to a trial of it in this (the recto-vesical) operation. Accordingly, we find that, in 1859, Dr. S. first applied it in the case of a recto-vesical operation performed by Dr. Bauer, of Brooklyn. The wound healed by the first intention, in eight days, and its employment here was announced as the beginning of a new era in lithotomy. At that time we had our second patient on whom we were about to operate for stone, and we decided to give it a trial.

The following is a report of the case.

A Mr. Jones, of Corinna, Me., aged 39, of a healthy and vigorous constitution, for more than three years had been troubled with more or less pain and distress in the bladder, particularly when urinating. At the time of our first visit, he had been confined to the room, under the care of a physician, for several months, and was in a very emaciated and feeble state from protracted suffering and from a large open abscess under the throat.

Introducing carefully a sound, I detected a stone lying loosely in the bladder. Upon further examination, it was thought best to postpone the proposed operation for at least one month, with the hope that he would then be in a more favorable condition. At the expiration of this time, however, our patient was scarcely any better, and there appeared nothing to be gained by delay.

Oct. 21st, 1859, in the presence of a number of medical gentlemen, and with the assistance of Drs. Benson of Newport, and Wilson of Dexter, the patient being fully etherized, and placed in a convenient position on the left side, with the thighs flexed, I proceeded with the operation as follows:—dilating the rectum with an ordinary speculum (not having Simms's at hand, which I very much regretted), the bladder being partly filled with lukewarm water, and a sound introduced and held by an assistant, I then made out with my finger the situation and limits of the prostate gland. With a two-edged scalpel, a cut was made through its central portion and bilaterally enlarged sufficiently to enable me to introduce my index finger, when it was dilated a little. The forceps were now introduced, the stone seized and extracted without much difficulty.

The stone is of an oval form, quite hard, with a rough surface, and measures, in its long diameter, an inch and a half; in its short diameter, three quarters of an inch. I have not yet had it analyzed, so as to know of what it is composed. Six silver-wire sutures were required to bring together and coaptate the edges of the wound. Upon these I adjusted "Bozeman's button," in the manner I had seen him apply it in the case of a large vesico-vaginal fistula, operated upon by him in the fall of 1858, at the "Hotel Dieu," which united by the first intention, and was cured in eight days.

On the twelfth day after the operation I removed the apparatus, when it was found united by the first intention, save a small place in the centre. I could not be surprised at this slight failure, in view of the very unfavorable state of our patient at the time. A few touches, however, with nitrate of silver, from my colleague Dr. Benson, under whose care the patient was left during my absence, was all that was necessary, as it closed by granulation in a short time. It was observed that a sliding down of a fold of the rectum over this small opening seemed to guard against the escape of anything into the bladder while it was healing.

Our patient was obliged to keep his bed for a long time, on account of a large bed-sore on one of his hips, which was very slow

in healing. But, at the end of three months, he was weighed, and it was found that he had gained about seventy pounds, making his entire weight two hundred. Both of these patients (the first operated upon by the lateral operation more than three years since), are now in good health.

It may be important to state, in closing this report, that both of them had used, for a number of years, water from wells containing lime.

Nov. 20th, 1860.

GALVANO-CAUSTIC OPERATIONS AND LARYNGOSCOPY.

WE quote the following from an interesting letter from Vienna, published in the *Edinburgh Medical Journal* :—

“ Two subjects have lately engrossed the attention of practical men in Vienna—Galvano-caustic operations, the surgeons; and Laryngoscopy, the physicians. The former was introduced into Vienna by Dr. Zsigmondy, *Primär wundarzt*, or chief-surgeon in the *Allgemeine Krankenhaus*. He has been at great expense in the manufacture and improvement of Middeldorf's ingenious apparatus, which was the first employed in this city; and he has used it very extensively in his practice. He soon convinced the profession of its manifold utility, and its applicability to all sorts of operations; and he has fairly established for it an honorable place among our recognized surgical instruments. This speaks greatly in favor of the apparatus, if, setting aside the charm of novelty which attaches for a time to many inventions, we reflect how very few new instruments are really worthy of being admitted into the surgical armamentarium. Zsigmondy has published the results of his operations with the galvano-caustic apparatus, in a series of articles in the *Wien Medic. Wochenschrift*, and has sent reprints of these papers to most of his friends. It reflects very great credit on Dr. Zsigmondy, that here, in Vienna, where the most trifling surgical matters are taken up and monopolized by eminent professors, he has been able, unaided and single-handed, to bring his system into good repute and extensive popularity in so very short a time.

“ As regards Laryngoscopy, I think that this novelty has wrought more mischief than benefit in Vienna; for, ever since it was first heard of, it has been the occasion of constant squabbles and miserable contentions. First of all, the profession began to quarrel about the priority of the invention, and as to who was entitled to the honor of the discovery. Innumerable articles appeared in the medical press, containing the most contradictory statements, showing how very little the writers really knew about the subject, and evidently published by men who rushed into print for the sake of appearing as authors. The controversy has lately broken

out afresh, and little wonder, for one of these critics has solemnly written that a patient should not be laid on his face if we wish to look down his windpipe !

" You, in England, must not be jealous of foreigners claiming all the credit of the discovery, for some share of the merit undoubtedly belongs to you. At the commencement of the discussions on the subject, Dr. Joseph Gruber, of Vienna, reminded the disputants that, in honor, justice and truth, a share of the credit of its invention should be awarded to your distinguished countryman, Mr. Wilde, of Dublin, who, in his admirable work on Diseases of the Ear, had recommended a similar instrument for the purpose of examining the pharyngeal extremity of the Eustachian tube. To be sure, the little mirror was not called a laryngoscope by Mr. Wilde ; but still, to quote the words of one of our most celebrated poets, ' Wo Begriffe fehlen, stellt zur rechten Zeit das Wort sich ein.'

" By means of this little instrument we have been enabled to examine carefully the whole of the interior of the larynx, and to watch the mechanism of the complex organ of voice. The instrument may prove very useful both in a physiological and pathological point of view, but, as yet, we have not gained much additional knowledge from its employment. Should anything of importance occur in connection with its use, you may depend on my losing no time in acquainting you with the full particulars."

THE CAUSE OF DEATH IN DROWNING.

BY M. BEAU.

DEATH in cases of drowning has been attributed to various causes—the introduction of air into the stomach, into the bronchial tubes, closure of the epiglottis, syncope, and asphyxia. M. Beau believes that the cause of death is asphyxia from want of respirable air; but that the small quantity of water which enters the bronchial tubes requires to be explained. Is it that, in drowning, there is an arrest of the respiratory movements ? To the solution of this question, M. Beau has applied himself, and has performed the following classes of experiments, which are recorded in the *Archives Générales de Médecine* for July, 1860.

CLASS I.—A dog is plunged rapidly into a vessel of clear water, and held there on its back. At the first moment, on its surprise, it makes a more or less complete inspiration; this is immediately followed by a jerking inspiration, during which a tolerably large quantity of air escapes in bubbles to the surface of the liquid from the mouth and nose. After this, there are no further expiratory movements. The animal struggles, and there is energetic action of its trunk and limbs; but no more inspiration or expiration. The lips remain convulsively closed. In about two

minutes, the movements cease completely; but the animal is not dead, and, if now withdrawn from the water, it may recover. Death does not take place until two or three more minutes have elapsed. On *post-mortem* examination, the lips are found to be firmly closed; the glottis is also closed. There is a variable quantity of frothy water in the small bronchial ramifications, the trachea, and frequently the large bronchial tubes. There is also a little water in the stomach, and some emphysema of the lungs.

CLASS II.—A dog is plunged into water in the same way, and removed at the end of two minutes, when he had ceased to struggle, and had lost consciousness without being really dead. He soon performs some respiratory movements, and opens his eyes; presently he rises on his feet; and gradually, without cough or symptoms of suffocation, he recovers rapidly and completely. If the animal be killed by pithing while he is recovering, and if the chest be opened immediately, frothy water will be found in the air-passages, as in the first class of experiments.

CLASS III.—The trachea of a dog is opened, and a canula is introduced. The animal is immediately plunged into water, and held under it on his back. Scarcely has submersion taken place, when air enters the chest by an inspiration, probably through the glottis and the canula; this is immediately followed by a jerking expiration or cough, during which bubbles of air escape from the mouth and through the canula. After this, the course of the symptoms and the *post-mortem* appearances are the same as in the first class.

CLASS IV.—The trachea of a dog is opened, and a canula is introduced, as in the third class of experiments. The animal is held under water, with his head free, but so that the opening of the canula is under the surface of the fluid. Immediately on this complete submersion taking place, water is drawn by an inspiration through the canula, and is partly rejected by cough by the same passage, with a certain quantity of air which escapes in the form of bubbles. The respiratory movements now cease, and the animal becomes restless; but, in a few seconds, respiration returns, and the animal makes regular inspirations and expirations, bubbles of air escaping at each expiration through the canula, and forming a froth on the surface of the water. As the inspiration of water goes on, and the interchange between the water and the air from the bronchi becomes complete, the quantity of bubbles diminishes at each expiration, until at last nothing but water passes through the canula. At last all movements cease, and the animal dies in the course of five minutes. On examination, the trachea and bronchi are found to be literally filled with water, which is not frothy. The lips and glottis are not convulsively closed, as in the former experiments.

CLASS V.—This a modification of the second class of experiments, introduced to show that the mere withdrawal of the muzzle

from the water, so as to leave the respiratory orifices free, while the rest of the body remains submerged, is sufficient to bring about recovery.

CLASS VI.—When the trachea of an animal is constricted by a ligature so that no air can pass, the animal struggles as if drowning; for about two minutes, he opens his lips and nostrils as if to admit air. In five minutes, death occurs; and, on examination, nothing is found in the bronchi, but the lungs are congested and emphysematous.

These experiments are held to show that death takes place in drowning from an irresistible horror of the water inducing an arrest of the movements of respiration and closure of the respiratory orifices; and that this takes place irrespectively of the actual introduction of a small quantity of water into the air-tubes at the moment of submersion. There is, then, in the words of M. Beau, a *hydrophobia of inspiration* in the drowning, analogous to the *hydrophobia of injection* in persons bitten by rabid animals. The last class of experiments show that death in these cases is comparable to that which arises from strangulation.—*Gazette Hebdomadaire*.

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY FRANCIS MINOT, M.D., SECRETARY.

Oct. 22d.—*Three Calculi from the Intestine of a Horse.* Dr. JACKSON showed the specimens, which Mr. Robert T. Edes, a member of the present medical class, had recently obtained from a man who met with them on slaughtering a horse at an establishment where useless animals are so disposed of. The largest is about $3\frac{1}{2}$ inches in diameter, and weighs 2 pounds $3\frac{1}{2}$ ounces; form very regular; rounded, with some flattening, and with one marked facette. The smallest was between 2 and 3 inches in diameter, weighed $9\frac{1}{2}$ ounces, was not rounded, and had very marked facettes; having been sawed, the concentrically-laminated structure was strongly marked, and for a nucleus there was found a piece of iron, a few lines in diameter, as it appeared upon the cut surface. The third specimen weighed $18\frac{1}{2}$ ounces, and was intermediate between the two others in regard to size and facettes; on section, it resembled the second in structure, and in having a piece of iron for its nucleus. In all of the three the color was a pale brownish, with a mixture of gray; the structure of the two that had been sawed was rather coarse than otherwise; and the laminated structure of the largest perfectly well marked externally.

The following is the result of the chemical analysis as made by Dr. James C. White:—

Mostly triple phosphate of ammonia and magnesia. A little phosphate of lime, and a trace of carbonate of lime. There was a considerable amount of silica also mixed mechanically with it, and some little animal matter.

The calculi have been presented by Mr. Edes to the Museum of the Medical College.

Oct. 22d.—*Tumor of the Neck, composed of a large number of Caseous Nodules; same Disease in the Abdomen; Paraplegia, without Lesion of the Nervous Centres.* Dr. ELLIS showed the specimens, and gave the account of the case, which he received from Dr. Bancroft, the Physician of the State Prison in Charlestown.

A young man, 28 years of age, was sent to the State Prison on Jan. 7th, 1860, and was soon after admitted to the hospital. A tumor, which first made its appearance under the chin, gradually enlarged, until it occupied the side of the neck, from the angle of the jaw to the clavicle. It was very firm and quite irregular, as if composed of many separate masses. He moved slowly, as if the spine was affected. Five days before death, there supervened complete paraplegia of the parts below the arms, the exact limits not being ascertained. After this he gradually sank, without any other peculiar symptom. The tumor had previously been regarded as the only disease.

Autopsy by Dr. ELLIS, 48 hours after death. The mass in the neck was composed of a large number of distinct, yellow, caseous nodules, apparently much more numerous than the lymphatic glands of that region. Many of them had softened in the centre. Some of the masses were surrounded by a reddish material, which resembled gland-tissue. The bronchial glands had undergone the same change, and in the lumbar region, around the cælic axis, were masses of a similar character.

A microscopic examination showed nothing more than small corpuscles, of the character of those which have been described in connection with tubercular disease.

The central parts at the base of the brain were somewhat softened, and there was, perhaps, a little softening of the spinal cord, but these changes were not such as to attract much attention, as the examination was made 48 hours after death. The other organs were normal.

The case was considered interesting, both on account of the peculiar appearance of the new formation above described, and the paraplegia, which supervened a short time before death. For this there was no apparent cause. It is to be regretted that a microscopic examination of the nervous centres was not made, and that a more complete description of the case itself could not be given, but, imperfect as it is, it may serve to introduce two others, reported in the most accurate manner, and in which the paraplegia was entirely unexplained.

These are reported at length in the 19th volume of *Virchow's Archiv. für Pathologische Anatomie*, by Prof. A. Kussmaul. An abstract is given below.

The first case was that of a student, 22½ years old, who had caries of the ankle from his sixteenth to his twenty-first year. After exposure to cold, he noticed some oppression in the head, numbness of the fingers and toes, and lost his appetite. On the first and second days of his illness he vomited, partly without cause, partly immediately after the use of the infusion of rhubarb. The paralysis increased until the third or fourth day, by which time there was complete loss of power over the voluntary muscles of the trunk and extremities. Ædema of the lungs made its appearance at the same time, causing great dyspnoea, until it terminated in death, the consciousness and speech remaining unaffected until the last.

Nothing was found after death but hyperæmia of both lungs and

œdema of the right. A microscopic examination of the medulla oblongata and spinal cord showed nothing abnormal.

In the second case, the patient, who was 51 years old, had suffered for eighteen months from violent pain in the head and face, also ozæna and cough. On the 6th of May, 1859, he was attacked with pain and progressive paralysis in the upper and lower extremities, commencing in the right arm and left leg. On the 15th of May, he suddenly expectorated much purulent, offensive matter, was attacked with violent fever and delirium, and died with pulmonary symptoms on the 19th. An accurate examination on the 15th showed conjunctivitis, a superficial ulcer of the cornea, slight paralysis of the left abducens nerve, double vision, diminution of the sense of smell, slight paralysis of the muscles of the lips, complete paralysis of the upper arm and leg; almost complete, of the forearm and hand, slight activity of the muscles of inspiration, and dulness on percussion over the upper parts of both lungs.

At the autopsy, nothing was anywhere found to explain the paralysis, even on microscopic examination.

The paralysis was attributed to marasmus and insufficient nourishment of the central organs, which is analogous to what is seen in paraplegia resulting from the closure of the aorta, losses of blood, &c.

Nov. 12th.—*Sore Mouth from filling a Tooth with Zinc Paste.* Dr. COALE was called to a young lady suffering great pain in her face. Her lips, particularly the lower one, were very much swollen, and presented some erosions on the inner surface. There was some increase in the flow of saliva. With these, there was constitutional disturbance, shown by headache and fever. Mild saline aperients were prescribed, but the local symptoms became worse. Upon getting further at the history of the case, it was found that she had had two teeth filled, a week before, and the filling consisted of some new patented article that was inserted in the form of a paste, and then hardened. This filling was removed, and the symptoms, up to that time getting worse, immediately amended, and a day or two restored her to health. Upon examination, it was found that the filling was composed of oxy-chloride of zinc, made at the instant, by mixing the liquid and highly caustic muriate of zinc with the oxide of zinc. These make a paste which soon hardens or sets. Dr. C. found several other cases where the same effects had been produced in the same way. In one instance the soreness lasted more than a week, the patient being entirely ignorant of the cause. The substance has been largely circulated among dentists, with strong recommendations to use it; but it appears to be highly objectionable, and in some cases might produce very deplorable results, were such symptoms as were witnessed in this case protracted or developed to a greater degree.

Nov. 12th.—*Parotid Tumor.* Dr. GAY showed the specimen, which he had taken from a man 74 years old. The tumor was first perceived about three months ago, being at that time of the size of a small pea, painless, and movable under the skin. During the succeeding two months it increased very slowly, and was attended with dull pain, and with a general feeling of uneasiness. During the last month the growth has been more rapid, the pain more severe, and occasionally shooting over the face. The jaws gradually became stiff, so that he could not separate them more than half an inch, and was prevented from taking solid food.

The tumor was of about the size of a hen's egg, situated in front of the right ear, well defined, and it occupied nearly the whole parotid region. It was hard at the lower or deeper part, was very firmly attached at the base, and but slightly movable. The skin over it was not involved, and could be easily moved upon it.

The wound is now nearly healed, and only a slight scar will remain. There is considerable paralysis on that side of the face.

Dr. ELLIS examined the tumor, and made the following report on it:—"Some portions were soft and red, others soft and whitish, while others, again, were firm, bluish-white, and fibrous or even cartilaginous in structure. At one point was a firm, yellow, osseous-looking mass, upwards of a quarter of an inch in diameter. On microscopic examination, the softer portions were found to be composed of fibrous tissue, or delicate fusiform cells, and nuclei, such as occur in fibroplastic growths. The firmer, bluish-white portions were either fibrous, or homogeneous and translucent; well-marked cartilage-cells being seen in some portions of the last. A section of the apparently osseous nodule was made by Mr. Edes. It contained numerous dark, irregular points, but nothing that was really characteristic of a Purkinjean corpuscle; neither were there distinct laminae."

Nov. 12th.—*Pneumonia fatal in Eight Days, without well-marked Symptoms. Hypertrophy of the Heart. Disease of the Kidneys.* Dr. SHATTUCK reported the following case, in which there was a remarkable absence of symptoms denoting a rapidly fatal issue.

The patient was an Irishman, 20 years old, a widower, who was well previous to Oct. 30th, when he had a stitch in his right side, after marching in a torch-light procession. He had been drinking freely for several weeks previously. He walked to the Hospital. On entrance, his pulse was at 108. He had some soreness in the chest on full inspiration; could not lie on the right side; was restless, and had cough, with grumous expectoration, which was quite foetid, as was also his breath. He was prostrated, and complained of loss of sleep. The physical signs were dulness on percussion, with bronchial respiration and subcrepitant râle in the lower right front of chest.

On the day after his entrance the patient was breathing with some difficulty. The pulse was at 100, quick, strong and regular. The skin was rather moist. The breath and sputa had a decidedly gangrenous odor. In the afternoon he began to sink. At 10 o'clock, he spoke very rationally of being refreshed after a comfortable sleep, but there was a good deal of rattle in the throat. He said he was dying, and asked to have a priest sent for. He died at 4½ o'clock, on the morning of the 9th. The urine was not examined.

Dr. ELLIS exhibited the organs. The brain was normal. There were pleuritic adhesions on both sides—old on the left, recent on the right. The right lung was very large, solid and heavy, weighing six pounds. The upper lobe was solidified, friable, and of a greyish or yellowish color, mingled with red; in other words, it was in a state of red and gray hepatization. The middle, and the upper part of the lower lobes were in the same condition. The remainder of the lobe was edematous and congested. The posterior and central parts of the lower lobe of the left lung were somewhat solidified, friable, and filled with red serum. The upper lobe was edematous. The weight of the lung was a little over two pounds. There was no offensive odor, and no cavity in either lung. The heart was universally hypertrophied;

weight, 14 ounces. No valvular disease. There was some atheromatous disease of the aorta. The liver was large; weight, $5\frac{1}{2}$ pounds. The kidneys were of large size, soft and flaccid. The cortical substance was thick and light colored, and contained numerous opaque yellow spots. The tubuli were crowded with epithelial cells. The opaque yellow spots showed a large quantity of fat. The spleen contained a thin capsule, two-thirds of an inch in diameter, which was filled with a white, caseous substance, containing fat globules, cholesterol, &c.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, NOVEMBER 29, 1860.

THE ETHERIZATION PATENT.—The following communication to the Editors will show that no fears need be entertained with regard to the possible penalty of an infringement of the patent for the exclusive use of ether:—

“MESSRS. EDITORS.—Recent newspaper notices have contained statements that the application made by W. T. G. Morton, formerly of Boston, for the further extension of a patent for the exclusive use of ether in surgical operations, has been rejected by the Commissioner of Patents at Washington.

“Inasmuch as threats of prosecution for such use of ether have not been infrequent, and as, in one case at least, in Boston, such a prosecution has been instituted and carried forward, though, as we believe, terminating at the trial with a remission of the claim for damages, we have deemed it of interest to the medical profession and to the community, to ascertain the facts in relation to this patent.

“Fourteen years ago, a patent was issued from the United States Patent Office for the exclusive use of ether, in surgical operations, to C. T. Jackson and W. T. G. Morton, the first-named gentleman having permitted his name to be used at the Patent Office solely with a view to secure his scientific rights as the original discoverer of the anaesthetic effects of ether when inhaled. This patent expired on the 12th of November, 1860. Some few months since, W. T. G. Morton filed his petition in the office of the Commissioner of Patents, praying for an extension to him of this patent for a further period of seven years. It is understood that he solicited Dr. Jackson to join in this petition, or to make to him an assignment of the Doctor's right to an extension. The files of the Patent Office show not only no such union in any petition, no such assignment of the Doctor's right to any extension, but some activity on the part of Dr. Jackson against the extension of the patent, in putting on file a remonstrance, printed evidence and an argument thereon.

“The Commissioner, the Hon. Philip F. Thomas, has rejected the petition for a renewal, and the patent has now no existence. The medical profession will thank the Commissioner for thus rejecting this application for the extension of this odious and absurd patent—a patent that ought never to have been issued, one which would never

have been granted had the Commissioner known all the facts at the time it was originally obtained.

"Hereafter no surgical operator will have any reason to be disturbed with threats of prosecution for his use of ether from any holder of a patent.

"Boston, November 21st, 1860."

SALTS IN THE TREATMENT OF DYSENTERY. *Messrs. Editors*,—Any one disposed to test the value of "Salts" in the treatment of dysentery, as recommended by Dr. Jackson in your last issue, may find in the Dispensaries a formula for preparing the article, which has long been a popular one and has the advantage of being required in a small amount at once. The formula is: Glauber's salts, $\frac{3}{i}$ i. ; water, $\frac{5}{i}$ iij. ; nitric acid, muriatic acid, each $\frac{3}{i}$ i. ; alum, $\frac{9}{i}$ ss. Dose, a large tablespoonful.

I have used it for some years, both in dysentery and chronic diarrhoea, and its use has been followed by recovery sooner than I have found it to be after any other prescription.

When the wholesale throwing overboard of drugs shall take place, our humane feelings will be comforted by the reflection that this medicine, at least, will not be "worse for the fishes," as sea-water already contains most of its ingredients.

B.

AMPUTATION AT THE KNEE-JOINT. *Messrs. Editors*,—Last summer I had an opportunity of witnessing a mode of operating in the region of the knee-joint, which is not laid down in any of the books on surgery with which I am acquainted. The patient was a young man, about 25 years of age. He had necrosis of the tibia, and it was thought necessary to amputate above the knee-joint, which was done as follows, viz:—by the flap operation; one flap taken anteriorly, and the other posteriorly; and in the anterior flap was left the patella. The femur was sawn off just above the condyles, and the patella was brought against the exposed head of the bone, between which two bones, an apparently good union has taken place.

The advantage from this mode of operating is, that you get the external surface of the patella for the end of the stump, in place of the cut end of the bone.

If you think the above worth publishing, please give it a corner in the next JOURNAL, and oblige yours, truly,

E. B. MUTTON.

Boston, Nov. 21, 1860.

N. Y. OPHTHALMIC SCHOOL.—The Introductory to the Ninth Session of this flourishing School, was delivered Nov. 10th, by Dr. Mark Stephenson, the Senior Surgeon to the Ophthalmic Hospital, at No. 63 Third Avenue, near Eleventh St. After welcoming the medical students and members of the profession to the Institution, and saying a few words congratulatory upon the comparative harmony that exists in the ranks of the medical profession in these days of strife, the lecturer reached the main subject of his discourse, which was—*"The Scientific Surgeon as distinguished from the mere Operator."*

The following extract contains truths which all sound practitioners should be prepared to admit:—"He who treats diseases of the eye at the present day, if he would be successful, must treat them upon

philosophical and rational principles. When he meets with disease in the mucous, serous, glandular, fibrous or nervous tissues of the eye, he will treat them upon the same general principles that he would similar structures in other parts of the body. When he meets with constitutional causes, or complications of any kind, he will modify his treatment accordingly ; he will be guided by the same rules that would dictate themselves in complicated disease elsewhere. Constitutional remedies now form an important and formidable item in the treatment of ophthalmic affections ; and here allow me to add, that he who loses sight of this view of the subject will fail of success. It is for the want of these comprehensive views in ophthalmic surgery that thousands have erred in their therapeutical treatment of the eye.

" The same skill and judgment will be required not only in the various operations upon the eye, but also in the after-treatment. An operation may be ever so well performed, yet if the subsequent treatment be not judicious, it may fail of success. The *mere operator* is distinguished by the number of mutilations he has committed ; the *surgeon*, by the number of cures he has effected. The surgeon consults the happiness, comfort, and ultimate safety of his patient ; the mere operator studies his individual interest or notoriety, irrespective of all other considerations. The mere operator goes by the minute, as if running a race ; the surgeon has for his motto *sat cito, si sat bene*. The one is fearless and ostentatious, and the other cautious, yet bold ; anxious, yet calm. The one glories in the knife ; the other seeks it as the last resort. The one is rendered a blessing to society, and an honor to his calling ; the other is odious to his brethren in the profession, and a curse to the community in which he lives."

Dr. Stephenson's lectures will be continued to the month of March, and clinical instruction given three times a week, assisted by his associates, Dr. Garrish and Dr. Stephenson, Jr. At the close of the term, an examination and ophthalmic diploma will be given to the graduating class, signed by Chancellor Ferris, Prof. V. Mott, and the attending surgeons. We are informed that the class promises to be much larger during the present session than on any former occasion.

SOCIETY FOR THE PREVENTION OF PAUPERISM.—From the twenty-fifth Annual Report of the Boston Society for the Prevention of Pauperism, we extract the following :—

Recapitulation.—Applicants in the office for females, for the year ending Sept. 30, 1860, 3,356 ; viz., 484 Americans or Protestants, 2,872 others : 268 were fifteen years or under ; 753 were between fifteen and eighteen years of age.

Supplied with employment, 2,573 ; viz., 326 Americans or Protestants, 2,247 others : 195 were fifteen years of age or under ; 530 were between fifteen and eighteen years of age. Places in the city, 1,250 ; in the country, 1,323.

Applicants in the office for males for the year ending Sept. 30, 1860, 1,255 ; viz., 700 adults, 555 minors.

Supplied with employment, 421 ; viz., 268 adults, 153 minors. Places in the city, 71 ; in the country, 350.

Summary.—Total of applicants, 4,611 ; viz., 3,356 females, 1,255 males. Supplied with places, 2,994 ; viz., 2,573 females, 421 males. Places in the city, 1,321 ; in the country, 1,673.

NEW MEDICAL JOURNAL.—We have received the prospectus of a new monthly journal of medicine, to be published under the auspices of the Berkshire Medical Society, entitled the *Berkshire Medical Journal*. It is to be edited by Drs. Wm. Henry Thayer and R. Cresson Stiles, Professors in the Berkshire Medical College, both of whom are well fitted for the post with which they have been entrusted. It will be the object of the Journal, says the Prospectus, "to advance, as far as practicable, the interests of rational medicine, extending the conquests of positive science over the domain of tradition." The first number is to be issued on the first of January, 1861.

EFFECTUAL USE OF THE SPONGE TENT IN STERILITY.—M. Pfeiffer mentions, in *L'Union Médicale* of the 28th ultimo, that Prof. Stolz, of Strasbourg, succeeded in removing sterility in the case of a healthy childless couple, who had been married four years. On examination, the cervix was found extremely narrow and very rigid. The use of tents of prepared sponge for a month or six weeks, with an occasional warm bath of an hour's duration, was advised; and the lady became pregnant two months after beginning the treatment. She was eventually delivered of a healthy boy. This procedure seems to M. Pfeiffer preferable to the division of the cervix, as advised by Dr. Simpson, especially where the patients object to the use of the knife.—*London Lancet*.

A HOSPITAL FOR NEGROES has been established at Charleston, S. C. The medical attendants are Dr. Cain, Physician, and Dr. Chisolm, Surgeon. It is to be opened for clinical teaching.

VITAL STATISTICS OF BOSTON.
FOR THE WEEK ENDING SATURDAY, NOVEMBER 24th, 1860.
DEATHS.

	<i>Males.</i>	<i>Females.</i>	<i>Total</i>
Deaths during the week,	31	38	69
Average Mortality of the corresponding weeks of the ten years, 1850-1860,	26.9	26.6	73.5
Average corrected to increased population,	82
Deaths of persons above 90,	1	1	1

Mortality from Prevailing Diseases.								
Phthisis.	Chol. Infan.	Scar. Fev.	Pneumonia.	Measles.	Smallpox.	Dysentery.	Typhoid Fever.	
15	0	7	2	0	0	0	1	

METEOROLOGY.

From Observations taken at the Observatory of Harvard College

Mean height of Barometer,	29.820	Highest point of Thermometer,	43°
Highest point of Barometer,	30.282	Lowest point of Thermometer,	26°
Lowest point of Barometer,	29.320	General direction of Wind,	W
Mean Temperature,	41°-30	Whole month of Rain in the week	0.651
For the week ending Nov. 17th (omitted in our last issue):—Mean of barometer, 29.826: highest point			

For the week ending Nov. 17th (omitted in our last issue).—Mean of barometer, 30.00"; highest point of barometer, 30.210"; lowest point of barometer, 29.363". Mean of thermometer, 45° 02' ; highest point of thermometer, 56° 5"; lowest point of thermometer, 29° ; general direction of wind, Northwest ; amount of rain, 1.653 inches.

MARRIED.—In this city, Nov. 22d, A. Ruppaner, M.D., to Miss Susie H. Mower, both of Boston.

DIED.—In Cumberland, R. I., Joseph Edwin Warren, M.D., aged 47 years, formerly of Ashby, Mass.—At Amiens, France, Dr. Joseph James Lloyd Whittemore, a native of Scituate, Mass., a graduate of Harvard University in the class of 1852, and for sixteen years a resident of Rio de Janeiro, 49.

Deaths in Boston for the week ending Saturday noon, November 24th, 69. Males, 31—Females, 85.—
Asphyxia, 1—Inflammation of the bowels, 1—Rupture of the bladder, 1—Congestion of the brain, 1—
disease of the brain, 1—Burrs, 1—Cholera morbus, 1—Consumption, 15—Croup, 1—Convul-
sions, 1—Debility, 1—Diarrhoea, 2—Diphtheria, 1—Puerperal disease, 1—Dropsy of the brain, 6—Scarlet
fever, 7—Typhoid fever, 1—Gangrene of the lungs, 1—Disease of the heart, 1—Disease of the kidneys, 2—
Congestion of the lungs, 1—Inflammation of the lungs, 2—Edema of the lungs, 1—Marsneys, 2—Old age,
2—Peritonitis, 2—Plurisy, 1—Premature birth, 2—Disease of the prostate gland, 1—Scrofula, 1—Teething,
2—Pneumonia, 2—Unknown cause, 1—

1—unknown, 3—whooping cough, 1.
Under 5 years, 28—between 5 and 20 years, 5—between 20 and 40 years, 17—between 40 and 60 years,
11—above 60 years. 8. Born in the United States, 42—Ireland, 20—other places, 7.